CITY OF HAYWARD

JUNIOR CIVIL ENGINEER

DEFINITION

The Junior Civil Engineer performs entry level professional engineering work in connection with traffic, construction and maintenance of Public Works projects; and other related work as required.

SUPERVISION RECEIVED AND EXERCISED

General supervision is provided by higher level professional engineer. Assignments may require indirect supervision of technical or clerical staff.

EXAMPLES OF DUTIES

Duties may include but are not limited to the following:

1. Accomplishes minor design projects independently.
2. Assists in the design of difficult or major projects.
3. Accomplishes original calculations and computation connected with design or traffic analysis.
4. Checks calculations made by other designers.
5. Performs drafting in design or traffic projects.
6. Reviews construction plans for all types of development.
7. Prepares maps for various uses.
8. Performs pencil and ink drafting.
9. Prepares display drawings for public meetings.
10. Accomplishes original trigonometric structural and hydraulic computations.
11. Uses field notes to plot topography, cross-section, profiles and contours.

EXAMPLES OF DUTIES (continued)

12. Operates calculators and computers.

13. Works with various city departments in coordination and completion of projects.

14. Conducts, reviews and analyzes traffic field studies.

15. Conducts field investigations of citizens' complaints.

16. Manages traffic data base.

QUALIFICATIONS

Knowledge, Abilities and Skills

A. Ability to communicate effectively orally and in writing.

B. Ability to perform entry level professional engineering design work and to accurately accomplish related calculations.

C. Ability to work with minimal supervision.

D. Ability to make independent conclusions.

E. Ability to handle heavy paper work.

F. Ability to work under pressure.

G. Ability to work effectively with other departments, agencies and the public.

H. Knowledge of basic civil engineering principles and practices.

I. Knowledge of drafting instruments and techniques.

J. Knowledge of mathematics, particularly trigonometry.

K. Knowledge of basic hydraulics.

EXPERIENCE AND EDUCATION

Any combination of education and experience that could likely provide the required knowledge and ability would be qualifying. A typical way to obtain the knowledge and abilities would be:

Education:

Equivalent to a Bachelor's Degree from an accredited college or university with major work in Civil Engineering or an engineering/science discipline related to traffic engineering.

License:

Ability to obtain a valid Class III California Driver's License.

PROBATIONARY PERIOD: One year

601CS87
June 1968
Revised September 1975
Revised February 1987
AAP GROUP: 5
FPPC STATUS: Non-Designated
FLSA STATUS: Exempt